

Notice of Allowability

Application No.

09/842,130

Examiner

Phuoc H. Nguyen

Applicant(s)

KANADA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10 May 2005.
2. ☒ The allowed claim(s) is/are 1,2 and 4-15.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Patrick C. Keane (Reg. No. 32,858) on September 27, 2005.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

Please amend brief description of the drawing as follows:

{AMENDED} [0027] FIGS. 13 and 14 are diagrams showing the contents an exemplary embodiment of a policy rule table.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please amend detailed description as follows:

{AMENDED} [0084] The content of low-level policy DB 813 will be explained with reference to FIGS. 13 and 14. In the low-level policy DB 813, rules can be stored in groups for respective network interfaces. That is, first element 1311 of FIG. 13 of a command starting address table 1301 can indicate a list of rules associated with the network interface having the interface, for example, No. 1, and second element 1312 of the command starting address table 1301 can indicate a list of rules associated with the network interface having the interface, for example, No. 2, and third element 1313 of the command starting address table 1301 can indicate a list of rules associated with the network interface having the interface, for example, No. 3. However, in

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 571-272-3919. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc H Nguyen
Examiner
Art Unit 2143

September 2, 2005


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Examiner's Statement of Reasons for Allowance

1. This office action is in response to the application filed on May 10, 2005.
2. Claims 1,2, and 4-15 are allowed
3. Claims include limitations that the prior art of record does not appear to teach or render obvious the claimed limitations as recited below.
4. The following is a statement of reasons for the indication of allowable subject matter:

The following is an examiner's statement of reasons for allowance:

The prior art of records fails to disclose or render an obviousness of a method for controlling a policy-based network comprising steps of: establishing a first policy consisting of first and second functions; converting the first policy into at least a second and third policies corresponding to the first and second functions; distributing and controlling at least one node using the second and third policies wherein the second policy defines a virtual flow label and the third policy is associated with the virtual flow label as cited in independent claims 1, 4-5, 9-10, and 14.

The closest found prior art is Banginwar (U.S. 6,611,863). Banginwar discloses a method for controlling a policy-based network comprising steps of: establishing a first policy consisting of first and second functions; converting the first policy into at least a second and third policies corresponding to the first and second functions; distributing and controlling at least one node using the second and third policies. However, Banginwar fails to disclose the second policy defines a virtual flow label and the third policy is associated with the virtual flow label as seen above. Claims 2,6-8,11-13, and 15 are allowed due to dependent claims.

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FIG. 13, these lists are empty. Fourth element 1314 of the command starting address table 1301 can indicate a list of rules associated with the network interface having the interface, for example, No. 4, and it shows, for example, "90" (1305) as the starting address of the filtering policy and, for example, "300" (1306) as the starting address of the metering and scheduling policy.

{AMENDED} [0159] In an exemplary embodiment of the present invention, if edge policy 301 is applied, any of the policy rules should be applied. However, in a case that no policy rule may be applied, the conversion explained previously may not be correct. Where policy rule 314 does not exist, none of the rules in edge policy 301, but core policy rule 362, would be applied to those packets with DSCP, for example, "10" that are from source points other than the source IP addresses, for example, "192.168.7.2" and "192.168.7.4". In this case, however, since the converted rules at addresses 364 and 396 (FIG. 14) test for the source IP address, but not for the DSCP, no policy rules would be applied, generating an incorrect result. In order to avoid such situations, in an alternate exemplary embodiment of the present invention, the following method can be used. A policy rule for the action equivalent to that of core policy rule 362 can be generated separately from the rules at addresses 364 and 396. The same condition as core policy rule 362 can be used for this policy rule. In this way, the core policy would be adequately applied also to those packets to which none of the edge policy rules have been applied.

{AMENDED} [0163] The fifth policy rule would be applied to those packets with DSCP, for example, "10" sent from source points other than the source IP addresses, for example,

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"192.168.7.2" and "192.168.7.4" therefore core policy rule 362 should be applied thereto. In this case, however, since the converted rules at addresses 364 and 396 (FIG. 14) test for the source IP addresses, but not for the DSCP, no policy rules would be applied, generating an incorrect result.